Energy& Environmental Policy in Poland

Andrzej Kassenberg

Institute for Sustainable Development

Energy Situation in Poland

Consumption of Natural Energy Sources has decreases about nearly 8% in the past 10 years, in 2000 – 2005: constant level of 3,85 – 4,02 m Terajoule.

POLAND		EU 15
	Effectivity of energy production	
36,5	%	46,5
	Economic´s energy intensity	
462	toe/million € GDP	170
	Energy-intensive Sectors	
36,8%	Surplus value	27,6%
	Thermoisolation	
150÷350	kWh/m2 per year	40÷90
	High-performance heat sources	
50-93	%	75-93
	Efficiency of long-distance heating	
50-86	%	70-91
	Energy-costs of households	
10,4%	% Expenditure	3,0%

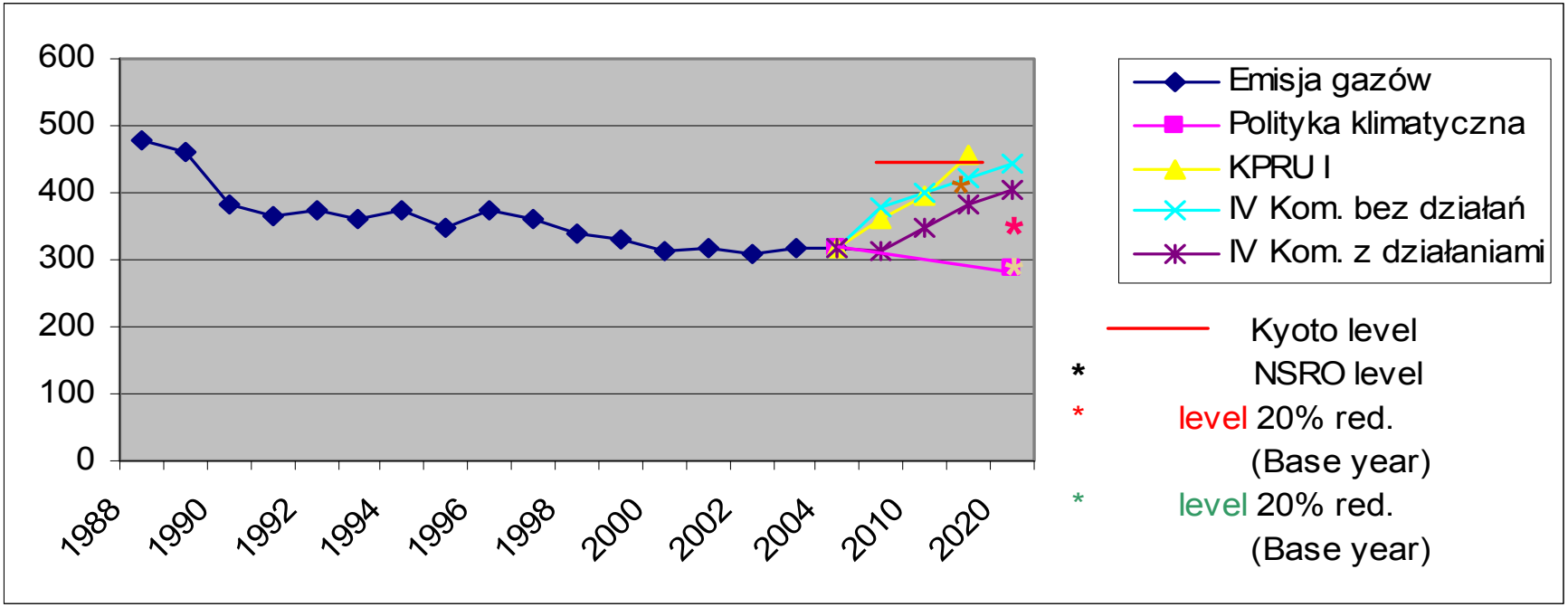
Energy Sector

plans to increase the production of electrical energy about 50% by 2005 – 2015

Environmental Protection in Poland

- **Greenhouse gas emissions dropped about 30%**
- **Emissions still average 8,4 tCO_{2e} per inhabitant, which is four till five-fold stronger than the level required to stabilize the climate**
- **Economy´s coal intensity in 2005 amounts to 75 tCO_2/1000 € GDP, whereas it should potentielly be 22 tCO_2/1000 € GDP**
- **The rate of renewable energy sources is in about 5%, the technical potential is 47%**

CO_2_Emission 1988 – 2004 and the Forecasts for Poland (mln. ton)



Financial Perspective for public transport for the period 2007-2013 will amount to 15,2 bn EU funding, therefrom 60% are meant for roads, 25% for the railway, 10% for public transport, and 5% for others.

Consequently for the period 2001-2015 an increase about 80% of Co2 emission in transport sector is expected as well as an decrease in railway use about 25%.

EU- level concerning Kyoto restrictions: 20-30% until 2020 and 60-80% until 2050 in comparison with 1990.

Main Problems

- Low energy efficiency
- Underdeveloped market
- Missing diversification of energy sources and fuels
- Poor dynamics of development of renewable energies
- Unsatisfied demand for investment
- Disregard of environmental policy
- Lack of unified intergrated economic and environmental/climate/energy policy

Unconsidered categories of the decision-making processes

- **Justice between Generations,**
- **Global Solidarity,**
- **External Costs,**
- **Anti-ecological Subsidies,**
- **Costs of Omission,**
- **Adaptation**

Arguments in favor of Nuclear Power

- **Argument 1– significant increase in energy demand will occur - until 2025 it will be two times higher than the current standard. It´s target is the european level of electrical energy consumption per head which is two times the current consumption.**

  Comment: the low level of energy production – two times lower than the EU-15 average– allows to catch up with current EU-level in 2025 without an increase in domestic energy production

- **Argument 2 – Low cost extension of variable costs from nuclear power plant electrical energy to fixed costs**

  Comment: High investment costs due to longer working hours of nuclear power plants than of traditional plants; moreover, the argument bases on the existance of a 50-year life financial contract, which cannot be realised without a guarantee given by the State

- **Argument 3: Global warming limitation as well as limitation of acid rain and other harmful emissions**

  Comment: Trivialization of dangers related to possible terrorist attacks, transport and radioactive waste deposition as well as technical mishap, and, above all, the threat to human species

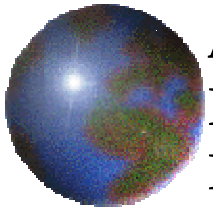
The Future Course of Energy and Climate policy I

- **Promotion of activities supporting changes of social behaviour in favor of more sustainable energy consumption (e.g. strenghtening of the position of public transport, including, among others, the Railway);**
- **Promotion of project solutions in technology as well as organisational, business und service activities, that contribute to decrease in ressources and energy consumption per service or production unit**
- **Encouragement of energy thriftiness by use of market mechanisms in the broadest sense (external costs in fuel- and energy prices, ecological tax reform, withdrawal from anti-ecological subventions)**
- **Creation of definitely and lasting incentives for Renewable Energies, in particular tied with development of local gas, heat and electrical energy supply**

The Future Course of Energy and Climate policy II

- **Provision of further incentives for the development of Cogeneration**
- **Restructuring of the cole industry and conventional energetics in terms of reduction brown coal´s role as an energy feedstock – conservation of a strategical reserve for future Generations**
- **Broad application of instruments, which add to stronger anchorage of climate policy, – among others mechanisms of ecofriendly investments (modernisation, promotion of innovation as an positive determinant of competition for polish economy) – Reasoning based on categories of expenditure-/loss prevention**

Thank You For Your Attention !



Andrzej Kassenberg
Instytut na rzecz Ekorozwoju/
Institute for Sustainable Development
Nabielaka 15 lok. 1
00-743 Warszawa
tel. (22) 8510402-04; fax (22) 8510400
a.kassenberg@ine-isd.org.pl
www.ine-isd.org.pl